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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,217	07/26/2001	Shigenori Ohta	21393.24	7508

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EXAMINER	
PRATT, HELEN F	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 08/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/890,217	OHTA ET AL.	
	Examiner	Art Unit	
	Helen F. Pratt	1761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 July 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-42* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-6, 8-13,15-20, 22-28, 30-33, 35-38, 41-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee 5,145,707 or Librecht or Arai et al. (Glutamyl Oligopeptides...) or Ishii et al. (Taste of Peptides...) or Guerrero et al. (0677249 A2)..

Lee disclose that it is known to make a salt enhancing composing using a combination of L-aspartic acid, L-arginine (basic) and sodium chloride (abstract). Claims 1, 4-6, 15 differ from the reference in the use of an acidic peptide. However, it is not seen at this time that the above amino acids are not in peptide form. Applicants' specification on page 10, lines 1-6 defines an acidic peptide as the number of acidic amino acids in the constituent amino acids is larger than that that of basic amino acid. Lee discloses the ratio of the amino acids to be from 0.8:1 to about 1:1.2 (col. 2, lines 54-64). However, as it is known that these amino acids enhance the flavor of salt, it would have been within the skill of the ordinary worker to use various ratios to make a palatable salt enhancing composition.

Liebrecht discloses a method of making a salt substitute by adding a mixture of formic acid and acid amino acid residues to food and drink (page 1, lines 10-24, page 2, col. 1, lines 15-21). Claim 1 differs from the reference in the use of acidic peptides to

enhance the taste of the salt in a beverage. However, the reference discloses that amino acids can be made by heating albuminous products of animal or vegetable origin with acids (col. 2, lines 79-88). It is not seen at this time that peptides are not produced by this method because the proteins are broken down with the use of acids. Therefore, it would have been obvious to add an acidic peptide to a food or beverage as shown.

Ishii et al. disclose a process of hydrolyzing wheat gluten into peptide fractions, the deamidation of the peptide fraction and the addition of the peptides to a soup stock to enhance its saltiness (umanmi) (abstract). Claim 1 differs from the reference in the use of acidic peptides. However, as the saltiness is enhanced, it is seen that the peptides would have been acidic absent a showing to the contrary. Therefore, it would have been obvious to add acidic peptides to a food as disclosed by Ishii et al.

Arai discloses that it is known to hydrolyze protein as in claim 1, neutralize it to make peptides and free amino acids (page 1254 first full para.) and to remove amino acids to make a brothy peptide that serves as a seasoning like MSG (page 1255, first incomplete para., 2nd col. lines 1-8). Claim 1 differs from the reference in the use of acidic peptides. However, it is not seen at this time that peptides are not formed from this method because hydrolyzing of protein can make peptides.

Guerrero et al. disclose that it is known to make a salt enhancer by adding to a food or beverage containing proteolysed protein (abstract). Claim 1 differs from the reference in the use of an acidic protein. However, claims 2 and 3 further disclose that an acidic peptide be made by subjecting the protein to hydrolysis and deamidation. The reference discloses that the protein can be hydrolyzed under neutral, acid or alkaline

conditions and that peptides and amino acids are made (page 2, lines 34-39). Deamidation is considered to be carried out when the protein which has been treated to proteolysis is treated with an acid or base (page 3, lines 25-35). Therefore, it would have been obvious to treat a protein to hydrolysis and deamidation.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over the above combination of references as applied to claim 1 above, and further in view of Arai.

Claim 2 requires that the acidic peptide be made by hydrolysis of protein. Arai as above disclose that it is known to hydrolyze protein. Therefore, it would have been obvious to hydrolyze protein to make acidic peptides in the process of the above references because Arai also makes peptides.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the above combination of references as applied to claim 1 above, and further in view of Isshi.

Claim 3 further requires deamination, which is usually done by an acidic treatment of protein. Isshi discloses hydrolysis and deamination of protein as above. Therefore, it would have been obvious to do so to make acidic peptides, which are the products of hydrolysis and deamination of protein.

The limitations of claims 8-13,15-20, 22-24, 25-28, 30-33, 35-38, 41-42 have been discussed above and are obvious for those reasons.

Claim 7, 14, 21, 29, 34, 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over the above references as applied to claims 1-6, and 8-13 above, and further in view of Berglund et al. (5,897,908).

Berglund et al. disclose a process of adding succinic acid to an amino acid containing composition (lysine hydrochloride) as in claims 7, 14, 21, 29, 34, 39 (abstract). Therefore, it would have been obvious to add such to other amino acid containing mixtures for its function as an acid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helen F. Pratt whose telephone number is 703-308-1978. The examiner can normally be reached on Monday to Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Milton Cano, can be reached on (703) 308-3959. The fax phone number for the organization where this application or proceeding is assigned is 703-305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Hp 6-24-03

H. Pratt

HELEN PRATT
PRIMARY EXAMINER